THE FARMERS' CABINET,

DEVOTED TO AGRICULTURE, HORTICULTURE, AND RURAL ECONOMY.

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Green's Patent Hay and Straw Cutter.

We are assured by gentlemen, in whose judgment we repose implicit confidence, and who have seen and used this machine, that its capacity to do all that is represented, is fully verified by their experience and observation. It is used without much labor. A boy of fifteen years old can cut as much hay or straw in thirty minutes, as will supply a stock of twelve head for twenty-four hours.

The advantages of using all kinds of fodder *cut*, is not known, or certainly is not attended to, by livery stable keepers, farmers, or gentlemen who keep their own horses. It saves full one-third of the fodder, and makes the animal healthier. A horse or a cow will become fat on one-half of the grain which is usually given, mixed with two-thirds of the usual quantity of hay if cut.

Fig. 31.—Green's Hay and Straw Cutter.

The grain must be mashed, or ground, and allowance is made for the cost of thus preparing it in this statement.

Mr. H. Coleman, under date of January, 1836, from Madison county, states:

"The next authority I quote, is that of Richard Peters, Esq., of Philadelphia, a name always to be in the highest measure revered by the friends of an improved agriculture. A more enlightened, active, disinterested, devoted friend to the cause, has never appeared among us. In a letter dated April 8, 1817, he says, "I find a wonderful saving of provender by chaffing it. I account for the utility of chaffing, by its exposing more points for the extraction of nutriment to the maceration of the liquids in, and the action of the stomach, or stomachs, of animals. And no provender is wasted, as it is by feeding it entire, either by negligence in servants, or uselessly passing through the viscera. I have strong hopes that the practice of chaffing will be a great relief in this season of comparative scarcity. We are so much accustomed to abundance, that we have never studied or practised the economy which necessity enforces. Three bushels of my chaffed hay weigh a stone, (fourteen pounds,) and this is enough for a horse, with a common allowance of oats or chopped grain, for twenty-four hours. Very little more, will be sufficient for a horse standing idle, without other food. Mr. Jones saves more than the wages of a man in a year, viz: more than seven tons of hay in the keeping of his four horses; for I allow five hundred pounds of hay, including waste, to keep a horse for a month. In the common and careless manner of feeding, this quantity will not do it."

I subjoin to these an extract of a letter from Mr. Jones, the gentleman above referred to, addressed to Judge Peters, about the same time. "My attention to feeding my horses, four in number, with cut hay, by measure, commenced in the fall of last year, in consequence of a publication I saw in one of our city newspapers, in which were de-

tailed great advantages that had been derived from adopting that practice. Experimenting on that mode of distributing hay to the number of horses above mentioned, I found, as nearly as I could calculate, a saving of thirteen hundred pounds per month.

"I have since extended the practice to the whole of my farm stock of cattle, and believe the saving to be in the same ratio, as stated relative to the horses. In addition to this saving may be added the advantage of an intermixture of cut corn stalks and other descriptions of food that would not be eaten separately, and without being chaffed. My horses and cattle are all healthy, and look well."

"The statement which I shall next quote, is that of Amos Sheldon, Esq., Beverly, Mass., a gentleman with whose character as an intelligent, excellent, and successful farmer, I have the pleasure to be well acquainted.

Beverly, Jan. 25, 1834.

Mr. J. R. Newell,

"Dear Sir: It is with pleasure that I comply with your request, asking the result of my experience on the subject of feeding stock. My stock consists of fifty-one head, namely: 8 horses, 4 oxen, 35 cows and two yearlings. The stock was fed in the usual way, with English salt and fresh meadow hay, with meal and potatoes as their case required, until the 1st of December last, at which time I commenced chopping my hay. In giving my experience, I must in some measure, ask the privilege of a Yankee, viz. that of guessing, but in this case I think I can guess pretty correctly, as much of the hay has been loaded in consequence of having to remove it from one barn to another, and calculating the number of days a load would last, the result is as follows:

700 lbs. of English hay, at $16 per ton	$5 60
200 " fresh, do. " 4 do.	40
100 " salt, do. " 8 do.	40
3 bushels corn meal,	2 25
8 bushels long red potatoes,	1 60
1 man and board,	48
Per day,	$10 73

400 lbs. English hay, chopped, at $16 per ton,	$3 20
100 lbs. fresh hay, chopped, at $4 per ton,	20
100 lbs. salt hay, chopped, at $8 per ton,	40
3 bushels of corn meal,	2 25
4 " long red potatoes, chopped,	80
140 gallons pure water,	0 00
1 man at 8 dollars per month,	26
Board of a man at $1 50 per week,	22
Per day,	$7 33

Balance in favor of straw cutter $3 40 cts. per day.

In addition to the above balance may be added an increase of six gallons of milk, and likewise something for the improvement of the condition of my whole stock."

Mr. Hale is proprietor of a line of stages running between Newburyport and Boston.

The whole amount of hay purchased from April 1, to Oct. 1, 1816, (six months,) and used at the stage stable, was,

tons. cwt. qrs. lbs.
32 4 0 10

At 25 dollars per ton, (the lowest price at which hay was purchased in 1816,) amounted to $800 00

From October 1, 1816, to April 1, 1817, whole amount of hay and straw purchased for and consumed by the same number of horses, viz.

tons. cwt. qrs. lbs.

Straw, 16 13 3 10 162,23 }
Hay, 13 14 1 00 350,00 } 510 23

Deduct on hand, April 1st, 1817, by estimation, four tons more than there was Oct. 1st, 1816, at $25 per ton, 100 00

Saving by the use of straw cutter, 4 months of the last 6 months, or the difference in expense in feeding with cut fodder and that which is uncut, 389 77

Whole amount of hay used for the horses of the Salem stage, 25 in number, from April 1st, to October 1st, 1816, viz: 22 tons at $30 per ton, (lowest price in Salem,) 660 00

Whole amount consumed by the same number of horses from October 1st, 1816, to April 1st, 1817:

tons. cwt. qrs. lbs.

Straw, 15 13 0 0 187,80 }
Hay, 2 15 0 0 81,00 } 268 80

Saving in using chopped fodder five months, 391 20

Total saving in using the straw cutter nine months, viz.

At Newburyport, 4 months 389,77 }
At Salem, 5 months 391,20 }
Total, 780 97

Richard Peters, Esq., of this city, informs us that he has purchased one of Green's Hay and Straw Cutters, and he proposes to feed his stock on cut food during the winter; and he feels assured that he will save at least one-half of the expense usually attending their support. His stock consists of six horses and two high bred colts, and two cows. He also proposes to use this machine at a milk

dairy consisting of fifteen cows. He has promised to communicate the results of these experiments, after the winter season is over.

Live Fences.

To the Editor of the Farmers' Cabinet.

Sir,—Having heard much complaint during several years past respecting the scarcity of suitable materials for making fences, I have concluded to inform those who read your valuable paper, and who are not already informed on the subject, that the *Virginia* or *Washington Thorn*, (Cratægus Populifolio) is much used in this country, in the construction of live fences, and when properly managed seems to answer remarkably well. I will merely say, at this time, that the berry or seeds may be gathered from this time until they drop from the tree, several weeks hence, and that there is a considerable quantity of them growing in the vicinity of Westchester, and other parts of this county, and that the seeds can be separated from the other parts of the berry, by mashing and throwing the whole into water; the whole sound seed settle to the bottom of the water, while the other parts swim, and can thus be separated. The manner of treating the seed when thus separated from the other part, I will reserve for another communication, probably in time for your next number. P.

Chester County, Pa., Oct. 16, 1836.

Manures—Application of Lime.

The following remarks are from a letter from Daniel Buckley, Esq., of Salisbury, Pa., published in the Memoirs of the New York Board of Agriculture, vol. III. page 124.

The land which I cultivate, according to M'Clure's treatise, is transition, composed of white and yellow clay and limestone, much of the latter appearing on the surface, intermixed with flint. Upon this soil I have made a liberal use of lime, ever since the year 1790, and think I have been well rewarded for the expense and labor, by the increased value of my crops.

The method of applying the lime which I have adopted in common with my neighbors is, in the first place, to plough up a sod field with a strong team, in the spring or fall; harrow it the way it is ploughed, and mark the field into as many squares as you intend to put on half-bushels, say one hundred on the acre, which will bring the furrows about twenty feet apart each way, and require fifty bushels to the acre. This quantity I have found to be most profitable. When the lime is burnt, and as soon as it is cool enough to handle, it ought to be hauled on the land already marked, and a half-bushel deposited in the centre of each square, in as compact a heap as possible. If water is convenient, I prefer to slack the lime immediately, rather than to wait for rain, as it becomes finer and can be more evenly spread. As soon as it has slacked, it is immediately spread and well harrowed. This method I prefer for Indian corn, barley, oats, rye, and potatoes.—On all the above crops I have experienced a great benefit from lime the first year after its application. With potatoes I add about fifteen two-horse loads of barn-yard manure to the acre, before planting. A second liming is often given, and much approved of, after an interval of three or more years. This amalgamates better, and can be more intimately mixed with the soil.

There are good farmers who differ as to the quantity of lime, that is most profitably applied; some say sixty bushels to the acre, some seventy, and some more. I have applied one hundred on an acre of limestone land, at a dressing; but have not been able to discover any benefit from using it thus freely nor any injury except in the loss of lime.

Wheat seldom receives any benefit from lime until the second or third year after it has been applied, except it has been mixed in a compost of yard manure and earth. This method is much practised in the lower counties of this state; though not by good farmers until they have applied lime as the basis of melioration. By this management they have raised their lands from an impoverished state, produced by injudicious cropping, to such a state of fertility, as I am informed, to enable them to fatten a bullock of six hundred weight on an acre, and to cut grass from the same acre sufficient to winter another.

Sandy soils are greatly improved by the use of lime. I lately purchased some of that kind, which was originally covered with chestnut timber, and was called mountain land. It has been cleared seventy years; but lying a distance from the farm buildings, had never received any manure but a dressing of lime. This land I have had repeatedly farmed since I owned it; and although to appearance it seemed to be almost a *caput mortuum*, with the aid of ten or twelve four-horse loads of the gleanings of a yard of a public house, it has produced as much, and as good, wheat, rye, oats, timothy, and clover to the acre, as any land in the township in which it lays. I consider the liming which it had fifty years ago as the principal cause of its fertility.

It is a general opinion amongst good farmers, that liming should be repeated every ten or fifteen years, and that the increased crops richly compensate the expense. It matters very little how it is applied, provided it is evenly spread immediately after it is slacked.

If suffered to air-slack, or lie after it has been water-slacked, it re-imbibes carbonic acid, which the fire had expelled, becomes lumpy, and is more difficult to be incorporated with the soil. Some spread it upon the sod and plough it under, and think they have as much profit in this way as in the other. When thus applied, it powerfully contributes to decompose the tougher fibres of the sod, and to convert them into nutriment for the crop.

New Inventions—American Institute.

A New York paper (the Times) gives the following account of some of the Inventions exhibited at the Fair of the American Institute in that city; particularly those for obtaining power, and those adapted to agricultural purposes. "We shall," says the Editor, "commence with the former, it being the most important article in mechanics, and in our poor opinion capable of great improvement. The present expensive and hazardous mode of procuring it by steam, or by the isolated principle of locating on a run of water, rendering the cost for the purchase and transportation of fuel, and of sending grain and goods to the mills, and from thence to market, so great as almost to overbalance the benefit that is to be derived from them. There are two articles at the Fair which will go a great way towards remedying the evil, at least for all the common purposes of life, viz: Gleason's self-supporting Portable Horse Power Machine, and Barton's Suction and Forcing Pump. The former is a machine about three feet by ten, calculated for one horse, or it can be made to any width, and for as many horses as may be desired. It is a chain composed of a species of cog-wheels, and skilfully arranged so as to act upon each other. There is a floor composed of various pieces of pine or oak, detached, one for each cog. On this the horse is placed, being secured by sides. He has but to tread on the floor, forming a slightly inclined plane, and the machine is kept continually revolving under him. The full weight and strength of the horse is thus brought to bear, without in the least fatiguing him, and which, aided by well applied machinery, produces great power. The cost of the machine is but $150, and comes within the means of every farmer and every person requiring machine power, to purchase. There were several machines at the Fair for which the invention is incalculably beneficial, both agricultural and mechanical. At this expensive time for all the necessaries of life, when a six cent loaf is only sufficient, with the et ceteras, for one hearty boy's breakfast, when good beef is selling in our markets at 15½ cents, pork 14½ cents per lb.; butter 34 cents per lb., and other articles of food in proportion, and when we are threatened with a rising market, it is well that we should first glance at that calculated to support the staff of life.

At the Fair there were machines for threshing, winnowing and grinding grain; there was also a machine for forming the flour into bread, and all that was required to complete it was the patent baking apparatus which is now in use, but which had a good substitute in one of Pierce's Kitchen ranges, which has been in great demand, and done wonders, in the culinary line, at the Fair. The power and ability of the machines may be known, from the fact that good bread was made from the grain on the straw in fifteen minutes, having gone through the various processes of being threshed (or the wheat taken from the straw,) winnowed or sifted, (separating the wheat from the chaff) ground into flour, kneaded into dough, formed into biscuits, and baked ready for the table.

Attached to the power machine was one of Warren's Patent Threshing Machines, the cost of which is but 25 dollars, and which, with the aid of the machine, (requiring but one horse to work it,) will thresh from 75 to 100 bushels of wheat per day. There are also machines of this invention calculated for four horses, which cost 50 dollars, and will thresh 300 bushels a day, also those intended for hand power, which cost but 20 dollars.

Passing from the threshing machine, the wheat and husks were placed in one of W. P. Bean's winnowing machines, the construction of which is very compact and simple, and which separates the wheat from the other in an astonishingly rapid style. We were not enabled to learn the price of this machine, or who it is sold by, but believe it to be a most excellent accompaniment to the other.

From here the wheat was placed in one of the Patent Premium Mills of Mr. L. Jackson, No. 41 Dominick street, and 145 Front street, the cost of which, for one horse power, is but 100 dollars, and which will grind 20 to 25 bushels per day, equal to any flouring mill in the country, or those for four horse power, will grind 75 to 100 bushels per day. This mill can also be guaged to hull rice, and is very portable and compact.

The flour thus manufactured, (and it appeared to be of excellent quality,) was then placed in a patent kneading and moulding machine, the proprietor of which we do not remember, although we intended to have noticed particularly, and formed into bread ready for the oven.

Thus, instead of the old and wasteful principle of threshing by the hand, and transporting to the mill and back, thence to market, a farmer, at an expense of 250 or 300 dollars, can have a threshing and winnowing machine

and perfect mill on his own premises, in his own barn, and worked at his leisure, by his own horse; his own family or two or three hired men attending them.

But this is not all. We know that there are machines for *sowing* grain, but none appeared at the exhibition. An invention, however, for cutting down grain and mowing, which appears to be one of the most valuable inventions of the age, was presented. It is the production of Mr. Alexander Wilson, and seems perfectly well adapted for what it is intended. It is a carriage, standing on light, large, broad rimmed wheels, with a large cylinder or trough in front, the lower outer surface of which is near the ground, and contains several knives, somewhat in the form of teeth, each being about a foot long and three inches broad at the extremity, which revolves or sweeps in the manner of the scythe, and is propelled by the turn of the wheels,—the machinery being so placed as to cause that effect. The knives pass a whetstone as they revolve, and are continually kept sharp.

The machine is drawn by a horse, in the same manner that a handcart is pushed forward, the horse being tackled with his head towards the wheels, and drawing upon the cross piece or handle behind him. The carriage can be turned round any object, such as a rock or tree, and made to cut clean and with perfect ease. Mr. Wilson states that he cut a hundred tons of hay with this machine last summer. This, we repeat, is an invaluable invention, and will save many thousand dollars worth of hay and grain that are now left to rot where they grow, for want of sufficient hands or means to secure them. There are also new Inventions for threshing clover seed, cutting potatoes for feed, shelling corn, cutting straw, churning butter, &c.

Use of Geology to Farmers.

One of the most obvious sources of advantage to the farmer from an acquaintance with the distribution of mineral masses, is the facility with which, in many instances, the injurious effects of small springs coming to the surface may be obviated. The theory of the earth's internal drainings is so simple that every man of common sense would be able to drain his lands upon sure principles, or else to know precisely why it cannot be drained, if he were to become so much of a geologist as to learn what rocks existed under his land, at what depth, and in what position. Springs never issue frow stratified masses, except from reservoirs somehow produced in jointed rocks, and at the level of the overthrow of these subterranean cavities. Faults in the strata very frequently limit these reservoirs, and determine the points of reflux of the water.—Let those faults be ascertained, or the edge of the pointed rock be found, and the cure of the evil is almost immediate. But some geological information is needed there; and landed proprietors, who think it less trouble to employ an agent than direct such a simple operation, may at least profit by this hint, and choose an agent who knows something of the rock he has to drain. Another thing, probably of importance to agriculturists, is the discovery of substances at small depths, which if brought to the surface, would enrich, by a suitable mixture, the soil of their fields.

Farm Buildings.

[Concluded.]

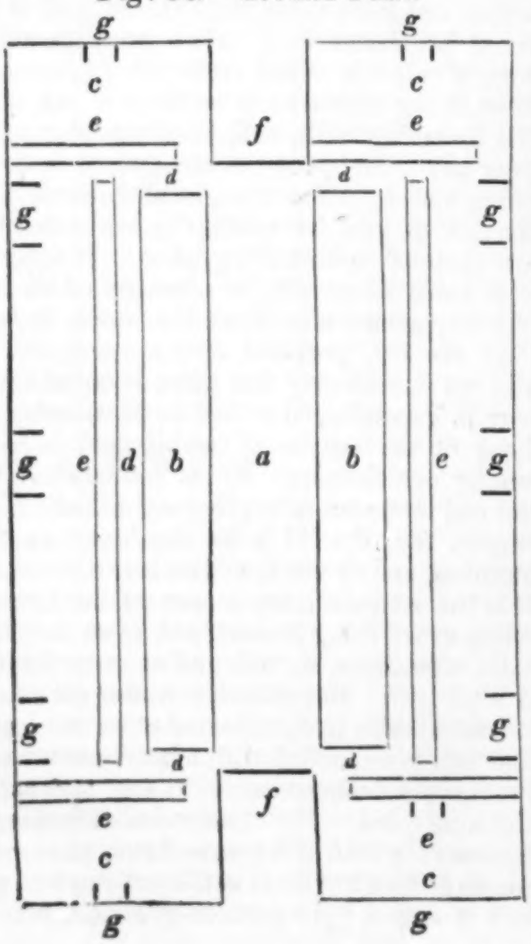
ECONOMY OF FEEDING STOCK.

There are so many collateral subjects connected with the barn and other out-buildings of a farm, that it is hardly possible to give an essay on this subject, without discussing the different methods and economy of feeding stock, with the preparation of the food, preservation of manures, &c. &c. But as the *principle* of feeding is the same in all kinds of neat cattle and horses, it will apply to all cases. In the first place, I hold that there is no straw, corn, fodder or grass cut on a farm, with the exception, perhaps, of the straw of peas, beans and buckwheat, but what may be consumed as *food;* therefore all reasonable pains should be taken to secure them in good order, and have them well stored and sheltered for winter food. How many thousand tons of valuable wheat straw have I annually seen in our wheat counties thrown out from the threshing mills, and piled up year after year to rot and taint the atmosphere with its offensiveness, when it might all be made into the best of food for cattle, by being housed and chopped, with trifling labor! It appears with many farmers to be a matter of no sort of consequence *who* feeds the stock, or *how* they are fed, provided they are only fed at all; not considering that there is equal economy in expending the food as in securing it. Look at the season of haying and harvest among our farmers. What preparation for toil and incessant labor, increase of help, high wages, &c. &c. Up by day-break in the morning, and at work, and no rest till dark.—It is the extraordinary season of the farmer, when every thing is sacrificed, even the Sabbath, oftentimes, to toil, and no cessation till it is all over. But when the winter comes on, this invaluable food, collected at so much cost and toil, is expended with a heedlessness and prodigality unaccountable to any rational or thinking mind. My own method of feeding is to cut *every* kind of straw, and even the coarse marsh or meadow hay, in the cutting box, and mix it with a light portion of shorts, bran or

oat meal, just enough for the cattle and horses to eat it. In this way they consume every thing. Nothing is lost; for what they leave is taken from the mangers and mixed over again with the new mess. It is the exclusive business of one man to cut the food, clean the stables, and feed the cattle: and if he needs assistance, he has it. By this means he becomes acquainted with the appetite and health of each animal, a matter altogether important. If they be out of health, or need extra nursing or attention, he knows it and provides for them. A change of food is occasionally given, and by this operation all is relished and eaten perfectly clean. We now feed about forty yoke of oxen, eight or ten horses, a dozen cows, some sheep and young stock, all in this manner, though not all in one building, without any waste at all. Every thing is saved. Every animal is tied up in its place excepting the sheep, and each has its own portion without fear or molestation. I well know that they consume less food per head by thirty per cent. than they did during the last winter, when they were fed nearly, if not quite equal to, the ordinary method practised throughout the country. Our oxen, I am satisfied, perform more labor, the cows yield more milk, and all the animals consume less food by being thus housed and attended.

But to the plan of the barn. It is here given.

Fig. 32.—*Ground Plan.*



Explanation.

a, barn floor, 14 feet wide.

b, *b*, bays for hay and grain, 18 feet wide and 92 feet long.

c, *c*, stables for cattle and horses, 13 feet wide in the clear.

d, *d*, passages to stables, 4 feet wide.

e, *e*, mangers for feeding, 2½ feet wide.

f, *f*, great doors, 14 feet wide.

g, *g*, stable doors, 5 feet wide, double.

Length of barn, 100 feet.
Width of do. 50 do.
Posts of do. 18 do.
Pitch of roof, 12½ feet.
Height of leanto posts, 7 feet.
Pitch of stable roof, 8 feet.
Length of side leantos, 100 feet.
do. end do. 38 do.

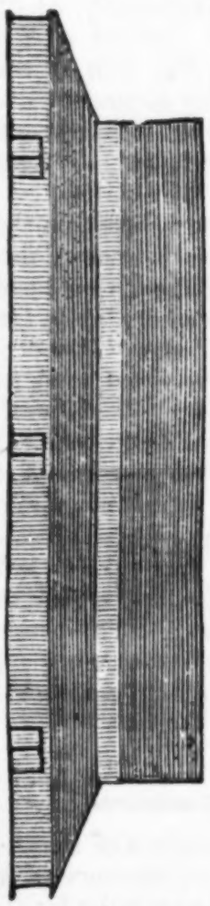


Fig. 33.—*Upright—Side View.*

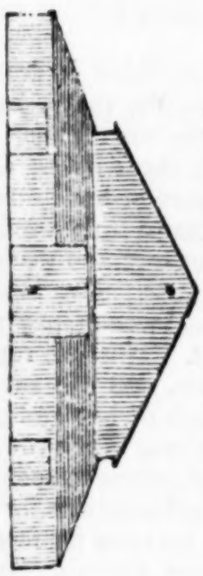


Fig. 34.—*Upright.—End View.*

The barn is framed as if to stand alone, omitting the lower girt at the ends on each side of the large doors. The leantos are then framed on to the barn in the simplest manner—the passage being *round* the main body of the barn, excepting at the ends, where the passage is *in* the main barn, and the leantos there only sixteen feet wide, and the manger is fitted up to the main barn. Only one passage is made to go into the short stables at the ends. Stalls are made seven and a half feet wide and broad between, and each ox or cow is tied next to the partition side of the stall, which prevents their getting together, and saves much room. The doors

are sufficiently wide to drive in a pair of oxen yoked, and large spikes are driven in the plates all round the stables to hang harness, yokes and chains upon.

The bottoms of the mangers are raised ten inches from the floor, and laid double. The sides of the stable are also battened with thin boards inside, which makes them perfectly tight and warm; windows with sliding shutters are made in the sides, to throw out the manure.

Girts run parallel with the main floor in the posts, across which are laid poles, nine feet above the floor, on which hay or grain can be piled up to the peak.

This barn will hold two hundred tons of hay, and forty-six yoke of oxen, or one hundred cows or horses. If only ordinary stock is kept, the *long* leantos need be only eighteen feet wide, and the *short* ones fourteen feet. Granaries can be partitioned off from the bays or stables, as may be convenient. If a threshing machine is used, a part of the stable can accommodate it. Its whole expense, finished complete, is about $1,500.

On this model, barns of any size may be built, and I am well satisfied that, according to the room required, it is altogether the *cheapest* in cost, and simplest in construction of any plan I have seen. If a less proportion of stable room be needed, it may be omitted where convenient.

The passages around the ends of the bays and in front of the mangers, are for feeding the cattle, every thing being put in front of them. The passages are wide enough to carry hay, and when the bay is partially fed out, the hay may be thrown directly into the passages.

I would on no account store hay or other material over the cattle, under the stable roofs, although there is considerable room, as I am satisfied from experience, that there is none too much space left for ventilation.

The floors are lined with thin refuse boards, excepting a part of the stables, it being my wish that *nothing be lost.*

This barn is placed on level ground, having no side hill convenient on which to place it. I would prefer, if possible, a sloping piece of ground, and make an ample cellar beneath it, to receive the manure, preserve roots, &c. &c. It will add to the expenses of building, but greatly to the convenience and economy of the farm.

This, it is true, is on a larger scale than is needed for an ordinary farm; yet many farms require as much and a larger quantity of barn room. If every thing be saved and housed that can be profitably expended in the feeding of stock, much more shelter is required than is supposed. If the farm be small, the size of the barn should be graduated to its wants. This plan has been closely examined by many farmers of great experience, and pronounced to be the best they have seen. The utmost possible economy of room is made for packing the hay and grain, and the stables are mere leantos, made of light frame, attached to the sides and ends of the main building. If wood covering for either of the sides or roof of boards and shingles are not to be obtained, they may be made of thatch. The bodies of the building may even be laid up of logs, and covered with slabs, so that they be well chinked and comfortable. It is true that there is some waste room over the cattle in the stables, but no more than is wanted for ventilation, and to pass of the respired air, which is deleterious to their health. The letting in of fresh air in cold and stormy weather, through the sides of the building, gives them colds and disease, to which they are as liable as the human family. But even if only sheds are wanted, I am satisfied that they are better to be attached to the sides of the barn in the way these stables are, than in any other, being more convenient, and allowing the stock to be fed in them with greater economy. The stables attached to this barn being for the accommodation of working cattle mostly, are wider than need be for an ordinary stock, and may be made narrower. But amongst all other plans, I have found none which combine the requisites of cheapness, economy of feeding and storage, like this. It has, withal, an appearance of snugness and comfort about it that greatly embellishes the farm.

If sheds are wanted in addition, they can be attached to the stables and run off in either direction, and accommodated with racks and mangers, as may be required. But every domestic animal on the farm should be fed at the barn, with the exception of sheep, which require, if kept in large numbers, a different and separate course of management. The custom of stacking hay or grain in the fields is at best a bad one, and if resorted to, it should be removed to the main barn as soon as the cutting season is over, or there is room in the barn to receive it. Small moveable barns are frequently built to store it in, and from them fed to cattle during the winter: but this, in the best of weather, is accompanied with waste, particularly in the manure, which is valuable even on the best of soils. It is, besides, much less labor to carry the hay either on sleds or wheels to the barn, and then feed it to the stock, than to go daily two or three times to fodder it out. So much has been said and written on the wasteful method of feeding at stacks, that at this time it is almost superfluous to mention it.

As to the other ordinary out-buildings to the farm, it is only material that they be

conveniently and economically built. No farm house should, however, remain without a swill house, with a large cauldron set in brick, an ample wood house, wagon and tool house, corn-crib, &c., near by. As to the dwelling, it is a matter of fancy with many, and to those who have the ability, provided they make it comfortable and convenient, it matters little what is the shape, size or style of it. Still there is a model that I consider cheaper and more convenient than almost any other, and for those landholders and farmers who build for the accommodation of their tenants, I consider it a most excellent one to follow. I am about building one on a farm of my own for the manager to live in, sufficiently capacious to accommodate his own family and half a dozen hired men. Its whole expense will not exceed a thousand or twelve hundred dollars, and if opportunity offers, I may send you the plan in some future communication.

Most truly and respectfully yours,

L. F. Allen.

Buffalo, Dec. 5, 1835.

Choice of Live Stock.

Before the improvements introduced by Bakewell, the value of an animal was entirely judged of by its bulk; and if a great size could be obtained, more regard was paid to the price the animal ultimately fetched, than to the cost of its food. Of late, since breeders began to calculate with more precision, small or moderate sized animals have been generally preferred, for the following reasons:—

Small sized animals are more easily kept, they thrive on shorter herbage, they collect food where a large animal could hardly exist, and thence are more profitable. Their meat is finer grained, produces richer gravy, has often a superior flavor, and is commonly more nicely marbled or veined with fat, especially when they have been fed for two years. Large animals are not so well calculated for general consumption as the moderate sized, particularly in hot weather; large animals poach pastures more than small ones; they are not so active, require more rest, collect their food with more labor, and will only consume the nicer or more delicate sorts of plants. Small cows, of the true dairy breeds, give proportionably more milk than large ones. Small cattle may be fattened solely on grass of even moderate quality; whereas the large require the richest pastures, or to be stall-fed, the expense of which exhausts the profits of the farmer. It is much easier to procure well-shaped and kindly-feeding stock of a small size, than of a large one. Small sized cattle may be kept by many persons who cannot afford either to purchase or to maintain large ones, and by whom the loss, if any accident should happen to them, can be more easily borne. The small sized sell better; for a butcher, from a conviction that in proportion to their respective dimensions, there is a greater superficies of valuable parts in a small than in a large animal, will give more money for two oxen of two hundred pounds each per quarter, than for one of four hundred pounds.

The form of animals a few years ago attracted the attention of an eminent surgeon, Henry Cline, Esq., of London. The following is the substance of the doctrines which he lays down:—That the external form is only an indication of the internal structure; that the lungs of an animal is the first object to be attended to, for on their size and soundness the health and strength of an animal principally depend; that the external indications of the size of the lungs are the form and size of the chest, and its breadth in particular; that the head should be small, as by this the birth is facilitated; as it affords other advantages in feeding, &c., and as it generally indicates that the animal is of a good breed; that the length of the neck should be in proportion to the size of the animal, that it may collect its food with ease; and that the muscles and tendons should be large by which an animal is enabled to travel with greater facility. It was formerly the practice to estimate the value of animals by the size of their bones. A large bone was considered to be a great merit; and a fine-boned animal always implied great size. It is now known that this doctrine was carried too far. The strength of an animal does not depend on the bones, but on the muscles; and when the bones are disproportionably large, it indicates, in Cline's opinion, an imperfection in the organs of nutrition. Bakewell strongly insists on the advantage of small bones, and the celebrated John Hunter declared that small bones were generally attended with corpulence in all the various subjects he had an opportunity of examining. A small bone, however, being heavier and more substantial, requires as much nourishment as a hollow one with a larger circumference.

Treatment of Milch Cows.

There is, perhaps, no part of the husbandry of our country so much neglected as that which relates to the providing of provender for the milch cows on our farms. On many estates, even those of magnitude, the chief part of the food, if not the entire, which they get, are the blades, the tops, and the husks of the corn, with an occasional gratuity of nubbins by way of a holiday feast. The consequence is, that if the winter be severe and

protracted, there is nine chances out of ten, that every cow, long before spring arrives, is either dry, or so near it, that the milk she will give is not worth the trouble and cost of *stripping*, so that many farmers with half a dozen or more cows have neither milk nor butter sufficient for the domestic uses of their tables, during the latter part of each winter; and by the time that the cold and bleak winds of March arrive, many of the cows are on the *lift*. How is it possible that it can be otherwise? There is little or no succulence in the food we have described in its dry state, and consequently cows fed upon it, must, for the want of matter convertible into milk, cease to yield it. In every other country, save our own, it forms a part of the business of every farmer or planter, to provide full supplies of nutritious food for his stock of every kind, and for those which comprise the dairy cows, especial pains and care are taken to provide a sufficient quantity of such roots as are heartening and succulent, so that by thus providing a substitute for the grasses of the pasture, or the soiling stalls or yards, his dairy, even through the dreary and inclement period of the winter, may continue to contribute largely to the comfort of his family, and to the increase of his fortune. No good farmer, then, will keep more cows than he can *keep well*, and in so keeping them, he finds his interest rewarded, and has besides the satisfaction of knowing, that in thus acting he has fulfilled an obligation imposed upon him by every humane consideration, and discharged a duty required by Him, who, in placing the beasts of the field in subjection to man, enjoined that he should extend towards them his kindest protection and care. We frequently hear gentlemen complaining of the difficulty of procuring such cows as will make profitable returns, and of the impossibility of keeping them to their milk during winter. The reason is obvious. No cow, and we care not what her breed may be, whether she be of the improved *Durham Short Horn*, the *Devon*, the *Alderney*, the common cow of the country, or any other kind—we say no cow can be kept to the milk pail unless you give her something which will both nourish her system and replenish her udder. To make a cow yield a liberal supply of milk through the winters, he should have, in addition to full supplies of good, wholesome hay or fodder, at least half a bushel of roots of some kind, or an equivalent of cabbages or kale per day. And if the hay should be fed *long*, each cow should have, at least two days in the week, messes of chopped rye and cut straw, to be either steamed or mixed up with boiling water, and permitted to remain until it be fermented before feeding. The ambition of procuring fine breeds of animals of all kinds, is one worthy of every praise; but *that of taking good care* of what we have, is equally if not more laudable. Besides these considerations, the interest of every farmer is always promoted by feeding his cows well. If fed in the niggard manner we have described, their keeping, such as it is, is a dead loss to their owners; they make no manure worth speaking about, and the animals themselves are comparatively valueless; and if kept *generously* through the winter, and sheltered from the weather, each cow will give her two gallons of milk per day, and make from four to seven pounds of butter per week, which latter should be set down as the profit, as the milk and cream consumed by the family will more than compensate for the feed. In addition to this, animals thus fed make three times the quantity of manure, and are always in a condition to command good prices. We have indulged in no speculative theories in what we have said, but have addressed ourselves to the common sense of the agricultural community, in the hope that they will see the propriety of adopting some plan by which our object can be obtained.—*Western Advocate.*

Planting Trees.

The best month for planting trees is November, observing the old saying of a celebrated gardener—"Take them with their old leaves to their new graves." Just as the sap begins to go down—and the leaves to turn, there can be no better time for planting all sorts of fruit, and other deciduous trees; but with respect to ornamental shrubs, and particularly evergreens, early planting is of the greatest consequence. When the weather is open, fruit trees and forest trees may be planted from the beginning of October to the end of February; but those that are planted before Christmas will do the best, especially if the following summer should be very hot and dry. But evergreens must be planted early, so that October is a better month for them than November, that the soil may get settled about the roots before the frosts come, and that the trees may have, at least, some hold of the ground before they have to encounter the heat of the sun and the cold east winds of March, the most trying month they have to stand against. It is folly to ask a gardener whether it be a good time to plant, if he is standing in market with trees to sell. Persons who have done so, and at their recommendation, planted evergreens in February and March, found that they almost all died, while to the gardener, who was paid for his trees, it was no loss at all; but, on the contrary, he had to supply others at Michaelmas.—"In the borders of my pleasure gar-

den," says a practical gardener, "I have no shrubs but evergreens, and the more I view them in the winter, the more I rejoice that I had planted no others; always green and cheerful in the gloomy months of winter, they give a beauty to my garden which it otherwise would not possess. The Portugal and common laurel, and broad leaved phillarea, the red cedar and evergreen oak—these, as they grow to such a considerable height, may, with here and there a yew, be planted in the back ground, and form a rich variety; while these, the Grecian and Siberian arbor vitæ the juniper, orbutus, the cypress, the silver holly, the laurustina, &c., should be planted in the fore ground, especially the laurustina, which is handsome in its growth, as well as beautiful in its flower. As it is rather a tender shrub it is better to buy them in pots and then turn them out carefully and plant them in a sheltered warm situation, with the soil adhering to the root. But no evergreens should be planted thickly, as they do not like the knife, and few persons have resolution enough to remove a tree, before it has materially injured, and perhaps spoiled the growth of its neighbor. Where the soil is good and the situation open, evergreens planted in October will make some vigorous shoots the second spring, and will fill the ground they are intended to occupy, with astonishing rapidity."

Housing and Wintering Potatoes.

The erroneous practice pursued by our best farmers generally, induces me to state the manner I have pursued for years with unvaried success. To preserve 500 or 600 bushels, I make a box or bin, four feet wide, three feet high, and of sufficient length to contain the required quantity; have the joints well fastened and made as tight as possible—put into the cellar bottom. If the potatoes are intended to be taken out at different times, two or three petitions should be put in, crosswise of the bin, to preserve such as are not required for immediate use from exposure to the atmosphere. After this preparation is completed, the next operation is gathering and housing them. Here I must again dissent from the usual practice of farmers generally. Instead of leaving them in the sun and wind to dry, after digging in small parcels, in carts or heaps, they should be immediately covered with tops, or something else, even if they remain in the field but a few hours. This destructive practice must, I think, be attributed to want of reflection.—It is the sole cause which produces the evils so much complained of by us, called the watery potato—by the Irish, the winded potato—destroying not only the flavor, but a great portion of the nutriment. In fact, sun, wind and rain, are as destructive to a new dug potato, as moonlight is to a fresh caught fish. When your potatoes are removed to the cellar, put into the bottom of the bin two inches of fresh earth; then fill one apartment with potatoes, within three or four inches of the top—immediately cover it with tough grass turf, cut up with the spade a little dovetailing, to the thickness of three or four inches—cover them with turf, grass side up, packed close, and pounded down with a wooden maul, to exclude as much air as possible. In this manner, in a cellar of suitable temperature, they may be kept fresh and good for a year without germinating. No danger is to be apprehended of having too much dirt stick to the potatoes,—it assists in preserving them. An occasional sprinkling of fresh earth among them will be found serviceable.—*J. C. Barnum.*

Diseases of Sheep.

The following excellent article we copy from the "Silk Culturist." The Editor of that useful paper says, the great losses which wool growers frequently sustain in consequence of the sickness and death of large numbers of their flocks induced him to compile from a rare and valuable English work a synopsis of the diseases to which sheep are liable, together with the symptoms by which they are known and the treatment by which they are remedied. The causes of the disease are in some cases assigned, and it is believed if they are carefully avoided and the remedies promptly and faithfully applied, the losses from disease and death would in a great degree be prevented, and the profits arising from their fleeces and young materially increased. As the remedies are simple and the ingredients composing the prescriptions within the reach of every farmer, it is to be hoped that every wool grower who has the misfortune to have a diseased flock will give them a thorough trial.

FEVER.

Fever in sheep is an inflamed state of the blood, disordering the eyes and mouth, and affecting the whole body, though not visibly. When any of the symptoms of a fever appear, the feet of the sheep should be examined, and if found to be hot, there is no doubt

of the character of the disease. Other diseases will produce an inflammation of the eyes and mouth; but hot feet are an infallible symptom of fever. This disease is often fatal in itself, and frequently induces others which are equally so. The cause is generally a cold. When only two or three of the flock are affected by it, the case is less desperate; but when many are attacked with it, it is more fatal.

The remedy is to keep the sheep in warmer and more sheltered places, bleed, and give the following medicine. Heat a quart of ale, and dissolve in it an ounce of mithridate—add half an ounce of Virginia snake-root, and one dram of cochineal in powder. This quantity serves for four doses, and one of them to be given morning and evening. If the sheep is bound in its body, an ounce of lenitive electuary is to be mixed with each dose; but if looser than ordinary it ought not to be checked as it will contribute to the cure.

PURGING.

Leave nature to her course when a purging comes on with a fever; but when the fever is abated it should be stopped; and the same remedy that answers for this purpose, may be adopted for such purgings as come on of themselves. Boil a quarter of a pound of raspings of logwood in two quarts of water, till but a quart is left, and when it is nearly boiled down put in a stick of cinnamon, strain it of, and give the sheep a quarter of a pint, four times a day, till the purging ceases.

If this does not produce the desired result, the following addition will render it sure of success. To every dose add a quarter of an ounce of diascordium without honey, and ten grains of Japan earth powdered, and give the doses only morning and evening.

TAG.

The tag is an external disease owing to the complaint last named. It is a distemper of the tail, beginning with filth and foulness, and ending in ulceration. The tag is situated in the inner part of the tail—it consists of scabs and sores, very painful and wasting to the animal, and is owing to the fouling this part by a purging. That tag is worst which follows a fever, because the inflamed state of the blood tends to increase the disorder, and when it begins, during the continuance of the disease, the matter of the fever may chance to settle it there. Two things are to be done; the first is to stop the purging; and the other, to clean the tail.

The last mentioned remedy, either in its weaker or stronger form, is to be used to stop the purging; and the tail being clipped, and the sore part laid bare, first wash it with milk and water blood warm, and then with lime water. After this turn the sheep into a clean dry pasture. Two days after look at it again, and, if not well, repeat the washing, and anoint it with grease and tar mixed together. Twice doing of this is generally sufficient to complete the cure.

DISEASES OF THE LUNGS.

Sheep are subject to be diseased in the lungs, which is easily perceived by their breathing, or by their coughing. Nothing requires a more speedy remedy; for they grow incurable, when it is neglected but a short time, and die as men in the consumption. Change of their pasture is essential to the cure—without it no remedy is effectual. It is owing to cold, and generally attacks sheep that have been kept on low grounds in wet weather.

When any of the flock exhibit symptoms of diseased lungs, drive them into an enclosed pasture, where there is short grass and gravelly soil; and where there is spring or other running water. Bruise a basket full of the leaves of colt's foot, and press out the juice. Bruise a quantity of plaintain leaves and roots together, and press out the juice.—Mix these, and bruise as much garlic as will yield about a fourth part as much juice as one of the others. Mix all together, and add to them a pound of honey, an ounce of aniseeds, and an ounce and a half of elecampane. Give a quarter of a pint of this, warm, to every sheep that is affected, once in a day, and it will by degrees make a perfect cure.

JAUNDICE.

Sheep are more subject than any other animals to obstructions of the liver. When this is the case it is seen in a yellowness of the eyes, and a tinct of the same kind in the skin. Farmers in some places, call this the choler, or, in their language, the color.

When sheep are attacked with jaundice, they should be put into an open pasture, and kept in moderate motion, but not fatigued. Boil in four gallons of water two pounds of fennel roots, the same quantity of parsley roots, and twice as much roots of couch-grass, all cut small. When the water is very strong of them, and there is about half the quantity left, strain it off, by pressing it hard. Bruise as much great celandine as will yield three pints of juice, add this to the liquor, and put in three drams of salt of steel. Mix all together, and every day heat so much of it as will serve to give every sheep that is ill, a gill and a half for a dose. This, with the before-mentioned directions, rarely fails of a cure.

To be continued.

Silk Culture.

The importance of this branch of agriculture is becoming every day more apparent. The soil of the Atlantic states, otherwise poor and run out, is found admirably adapted to the cultivation of the mulberry, and promises through this source a rich remuneration for the trifling trouble necessary to bring the trees to perfection. If the business is pursued with industry and zeal, the old States will be able to compete with the new, in despite of difference of soil and climate. Few farmers have any idea of the vast profit of the silk business. Four hundred and twenty pounds of silk were produced from four acres of ground, near Boston, planted with mulberry trees. This silk sold for $3 50 per lb. —amounting to $1,470. The labor was performed by four girls, whose attention was required but a small portion of the time. The following statement of the profit of one acre of ground is given by Andrew Palmatier, Esq., of New York:

One acre fenced with mulberry hedges, and set out with trees,	250 00
Interest and additional expenses during 5 years,	187 50
	$437 50

The acre will then produce:

From 5 to 10 years	20 per cent.
" 10 to 15 "	47 " "
" 15 to 20 "	112 " "

after 20 years, the average will continue 112 per cent.*

The proportion of silk to the acre has been variously stated from 40 to 100 lbs.—a fair estimate would probably be about 60, which at $3 50 per lb. would be $210—a much larger sum than could be realized in any other manner from the same quantity of land. The demand for silk goods has been constantly increasing in this country. The importations last year amounted to nearly 16 millions of dollars, and it is probable that like the cotton business, the consumption of this elegant article of dress will more than keep pace with its increased cultivation. When the fact is generally known that any young lady, by a few hours of pleasant recreation in each week, can clothe herself in a splendid suit of native silk at the low rate of 12½ cents per yard, there will not be a garden without its mulberry trees, nor a chamber without shelves for the accommodation of the industrious spinner. The individual who devotes a portion of his leisure to the introduction of this elegant and profitable business, should be regarded as a public benefactor.—*Portsmouth Gazette.*

* We presume this estimate is entirely too high.

NATURAL HISTORY.

Radiata, Worms, Insects.

The *radiated* animals are so named, on account of the different parts of which they are formed, being placed like rays around a common centre. The star-fish so frequently seen on the English coasts, is a familiar example of an animal of this class. The *Echinus* Sea-egg, or Sea-urchin, is another instance; the shell, which, when the creature is dead, is frequently found on the sands, and which, in that state, bears some resemblance to an egg, was, when its inhabitant was living, covered with an immense number of spines or prickles, by means of which, as if with legs, it moved from place to place; on account of these appendages it is called the Sea-urchin, or Hedge-hog. In the smaller species, these spines, when magnified, are very beautiful objects. Annexed (Fig. 35,) are enlarged representions of three varieties. The animals themselves

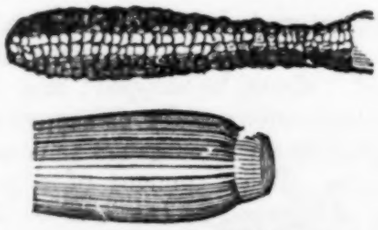


Fig. 35.

are curious in their formation, but can only be seen to advantage when in a living state; on this account great dexterity in the observer, and the best opportunities of observation are required; as the objects must, in all cases, be enclosed in some vessel containing sea-water, and will not live for any length of time if removed from the sea-side.

Worms of all kinds present the same difficulties of observation as the radiated animals. We give a magnified view of the head of the *Echinorhyncus*, (Fig. 36,) a worm which

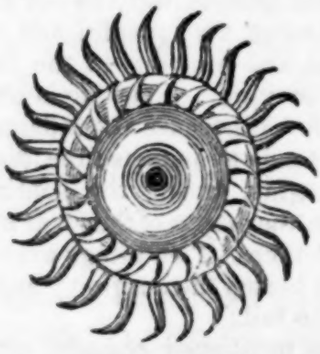


Fig. 36.—Head of the Echinorhyncus.

infests the intestines of animals. A simple inspection will show how difficult it must be

to dislodge the intruder, when once it has fastened the numerous hooks with which the mouth is surrounded, in the flesh of its victim.

Upwards in the scale of the creation, we next come to the insects; and here the microscopic observer will find abundance of

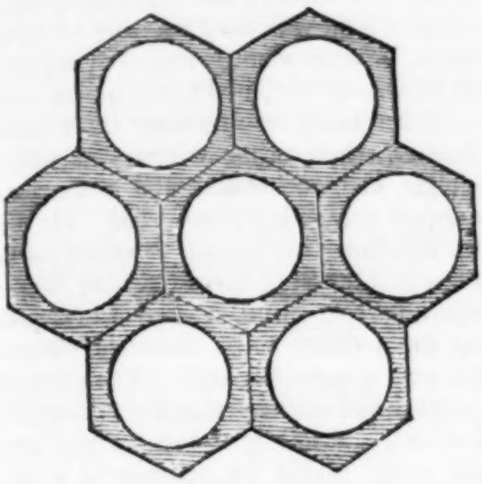


Fig. 37.—Eye of the House-Fly.

materials for his curiosity, for the most insignificant being of this class, will afford him amusement for hours; its eyes, wings, legs, sting, horns, nay, the very down with which its body is covered, present an interesting and splendid spectacle. The eye of the common house-fly is formed of numerous lenses, or magnifying glasses, placed close to each other, and curious both from their form and arrangement. The engraving (37) represents the order in which they are arranged with reference to each other. The number of these lenses in a single eye frequently amounts to several thousands. The following figures show the curious structure of the

Fig. 38.

foot of the same fly. The two broad flat pieces seen beneath the claws act something like suckers, and give the fly the power of walking upon the ceiling, or upon glass, without the danger of falling.

Fig. 39.—Foot of the Fly.

The sting of the gnat, when its parts are carefully separated and highly magnified, present a terrible display of barbed darts and cutting instruments; this weapon is placed under the throat of the insect, and it is curious and instructing to notice the manner in which it is employed; if the gnat uses it for the purpose of penetrating flesh, the darts are inserted, as well as the rest of the apparatus; but if feeding on fruit, it only thrusts in a little sucking tube, and by that means extracts the juices.

Fig. 40.—Sting of the Gnat.

[To be continued.]

MISCELLANEOUS.

POTATOES MANURED WITH PINE LEAVES.—A Southern paper states that pine boughs and leaves make an excellent manure for potatoes. A farmer in New Jersey having a large number of young pine trees growing near his potato grounds, he gathered a sufficient quantity of the boughs to form a considerable covering to a row of potatoes which he was planting in drills. In the drill, on one side of this he used lime for manure, and on the other he put in marl. They were all covered with earth in the same manner, and received the same culture. On digging them, those that were manured with the pine were twice as large as the others, and double in quantity.

LIME.—As farmers are now engaged in ploughing up their ground for winter fallow, to receive the meliorating influence of the frost and snows, would it not be well to turn

in a coat of lime with the vegetable lay. By so doing, it appears to us they would, the ensuing season, receive all the benefit from the lime which is usually derived from it the second year. The peculiar virtue of lime consists in part, in accelerating the progress of vegetable decomposition, and thus, within a given time, increasing the quantity of carbonic acid evolved, and in correcting any superabundance of vegetable acid which may abound, and so far as these benefits may be derivable from the application of lime, corn planted in fields next spring, manured this fall with lime ploughed in, would receive every advantage which usually appertains to crops the second year.

Lime.—Lime, now so extensively and profitably used in agriculture, exists in its purest state in good marble. The refuse of marble, which is in great abundance at our valuable quarries in Montgomery and Chester counties, has recently been burnt into lime of the best quality, and promises to be a valuable acquisition to our farmers, and a profitable appropriation of a refuse article to the owners of marble quarries.

Maize Sugar.—Dr. Ballas, having sent two specimens of the Maize Sugar to the French Academy of Sciences, M. Biot has submitted them to certain experiments of polarization, in order to ascertian their precise nature. The deviation of the luminous rays to the right of the place of polarization, in an aqueous solution of this sugar, after filteration, and the proportion of its aversions to the left by the addition of liquid sulphuric acid, have been found by M. Biot to agree with the pure sugar derived from the cane.

Disease among the Stock in Louisiana.—According to the Louisiana Advertiser, *Chorbon* is the name of a disease as fatal among the horses, mules, horned cattle, sheep, hogs and wild deer of Louisiana, as the cholera is to man. Neither is man wholly exempt from it. Many instances have been known, where those who have been attending to their horses and cattle in the disease, have been attacked with it, and repeated instances have occurred of death ensuing. Planters in the very pinch of a crop, have been known within a week not to have a horse to put in the plough; although they may have had a dozen—all having died of the fell disease. A planter writes to the editor of the Advertiser that an ox which died of the disease, had been skinned and left in the pasture, where his hogs ate of it and were instantly attacked with the chorbon. Sulphur, flour of sulphur and brimstone, it is said, will effect a speedy cure.

Seed Wheat.—An amusing and instructive anecdote was related to me of a farmer in Vermont, to whom his neighbors were accustomed to resort, for the purpose of securing their seed wheat; and was able to supply with that which was very superior in its appearance, productiveness, and early maturity, which he was accustomed to call barrel wheat, and which readily commanded three dollars per bushel, when other wheat was sold for one dollar, and one dollar and a quarter.—The secret was at last discovered. He used, before threshing his wheat, to select the best sheaves, and striking them over the head of an open barrel, three or four times before laying them down to be threshed, obtaining in this way a superior seed. As in this way the largest and earliest ripe kernels would be shaken out, and fall into the barrels, he obtained what might be considered a select seed, which he denominated his "barrel wheat;" and which the farmers, until they heard how to do it for themselves, found their advantage in purchasing.

Progress of the Arts.—The May-bug is now becoming an entirely new article of commerce. A society formed for the purpose, at Guedlinbourg, has caught nearly 19,000,000 of May-bugs to make oil of them. They have already made the attempt in Hungary, and obtained three measures of oil from eight measures of the May-bug. They put the insects into earthen pots, covered with straw or a tissue of metallic threads, and turn them over upon a heated vessel, which is destined to receive the oil which flows out—this oil is particularly good for greasing wheels.—*Paris Paper.*

Beet Sugar.—The manufacture of beet root sugar in Belgium is extending on a large scale. Six new establishments have been authorized, all in the province of Hainaut. The government could not refuse the licenses; but it appears they are devising means for filling up the gap made in the revenue by this novel produce.

A young farmer having purchased a watch, placed it in his fob, and strutting across the floor, says to his wife, 'Where shall I drive a nail to hang my watch upon, that it may not be disturbed and broken?' 'I do not know a safer place,' replied his wife, 'than in our *meat barrel*, I'm sure no one will go there to disturb it.'

Early rising is a merit in whoever practises it. Farmers are generally early risers.

Neatness.

Let order o'er your time preside,
And *method* all your business guide;
One thing at once be still begun,
Contrived, resolved, pursued and done;
Ne'er till to morrow's light delay
What might as well be done to day;
Neat be your barns; your houses neat;
Your doors be clean; your court-yards sweet;
Neat be your farms; 'tis long confess'd,
The neatest farmers are the best.

The Farmer.

Let money'd blockheads roll in wealth,
Let proud fools strut in state—
My hands, my homestead, and my health,
Place me above the great.

I never fawn, nor fib, nor fain,
To please old Mammon's fry;
But independence still maintain
Of all beneath the sky.

Thus Cincinnatus at his plough,
With more true glory shone,
Than Cæsar with his laurell'd brow,
His palace and his throne.

Tumult, perplexity and care,
Are bold ambition's lot;
But these intruders never dare
Disturb *my* peaceful cot.

Blest with fair competence, I find—
What monarchs never can—
Health and tranquility of mind,
Heaven's choicest gift to man.

T. G. Fessenden.

Apple Pepper.

A few summers since, we were presented, through the kindness of Dr. Munroe, of the United States Army, with a few seeds of this delightful and useful vegetable. We planted them in our garden, and have been thus enabled to increase our stock of seed.

This pepper was introduced, not many years since, from the East Indies, by the Superintendent of the Marine Hospital at Norfolk. Among the natives of the East, it is highly valued for its many excellent qualities. Dr. Munroe informs us, that as a preventive of colick, and spasmodic complaints, it is highly useful, and as such, has been used with great success in the large hospital above alluded to.

The great peculiarity of this pepper over all others, is its flavor. It so much resembles the apple in this respect, that any one might easily mistake it for that fruit while eating it. To the taste it possesses not the least acridness or burning; its seed and rinds may be eaten without any unpleasantness.

In its green state the pepper makes a most delicious pickle, and when dried and powdered and rubbed upon meat, it is an infallible preventive against the attack of all kinds of bugs and insects. In this respect it is preferable to the common pepper, inasmuch as it leaves upon the meat no acrid taste. The rind is very thick, and the pods about the size of the common bell pepper.—*Southern Agriculturist.*

Beautiful Tree.—A beautiful tree has been discovered in the Bay of Bambatoe, on the western coast of Madagascar, by M. Boyer. It makes a magnificent appearance, and is supposed to come originally from the eastern coast of Africa. Some seeds from it, sown at the Mauritius, have perfectly succeeded. It belongs to the order Leguminosæ, and M. Boyer thinks it is a new genus, which he calls Colvillea racemosa, the first name being given in honor of the Governor.

American Silk.—Mrs. Kimball, of Hopkinton, appeared at the Fair of the Merrimac County Agricultural Society, in Concord, on Wednesday last, clad in rich and durable silk of her own manufacture. She procured the mulberry trees, raised the worms, reeled, twisted, colored, and wove the silk with her own hands.—*Dunstable, (N. H.) Telegraph.*

Wool.—The growing of wool is a subject which engages the attention of many of the farmers and speculators in the eastern states; and it proves to be a business which affords them a very fair profit, and will we doubt not continue so to do, so long as wool remains as important a staple in the manufactures of our own country as it does at present. The rearing of sheep is too much neglected in this state. Many of our farmers have supplied the butchers and drovers until their flocks have become much reduced in numbers and depreciated in value. This ought not so to be; for in the language which John Hancock put into the mouth of an ancient sheep, "Farmers gain more by our lives than by our deaths;" which saying holds good at the present day. But if a farmer wishes to dispose of a part of his flock, it is a great error to cull the best for this purpose, as is the practice of many, who wish to get the highest price. On the contrary, the aged and inferior as to wool, should alone be spared if you wish to keep your flock in a flourishing condition.

Cutting and Curing Hay for Cattle.

BY W. BUCKMINSTER, ESQ.

We think there cannot be a doubt that hay, &c., is better relished, and is eaten up cleaner when chopped and put in a clean manger than when given whole. The great question therefore is, *shall we save enough by the process to pay the labor?* And the answer must depend on various circumstances.

Stage horses, or such as are driven constantly, have not so much time to masticate their food as others have, while their drivers have more leisure to tend them, and may just as well devote a portion of it to prepare this food for digestion as to let the team do the whole business. When teams are kept principally on grain, straw will answer well to be mixed with it, and this straw must be chopped up or it cannot be mixed, and will not be eaten. At the south, therefore, where they cannot raise so good hay as we can, and where they raise grain with more ease, they make a great business of cutting up straw and coarse hay to be mixed with their grain. With us the poorer kinds of hay should be cut, or horses will not relish the food. Our correspondent objects to the expense of a cutter. We have seen cutters sold in Baltimore at eighty dollars apiece, and have been told of some for which ninety dollars were demanded! We do not think many of our farmers could afford that sum for one, but this is not the only cost—the labor of working the machine for a stock of cattle of forty head, through the winter, would much exceed the interest of the capital laid out for it—probably six to one.

But the more simple cutters may be had for a far less price, and we think the simplest ones best. We have never seen one that would feed itself well, and the best mode of cutting up fodder is to employ two workmen at a time—one to feed and one to cut. Such men as we usually hire would be engaged not less than an hour each day in cutting up fodder for forty head of cattle. Then they must be fed, and must have tight mangers for their chopped fodder.

One hundred and eighty days—our foddering season—require three hundred and sixty hours extra labor for cutting up the fodder. Here are forty days extra labor, and we cannot count this less than thirty dollars in money. This sum will buy three or four tons of good stock hay, and the question is, have we saved enough by cutting to pay the labor?

Corn stocks ought to be cut up fine, for cattle can eat but a small part of it uncut. The top stalks and the husks are rich food when well secured, and ought not to be lost. When we have none but the poorer quality of hay, we may see our account in cutting it up for the cows in the spring, and mixing a little meal with it, but cows and horses will eat up clean our good hay without our chopping it, and we much doubt whether in such case we ever get pay for our labor of chopping.

On the subject of feeding we have intimated in a former number, that it is a good plan to mix up hay of different kinds, either at the time of stowing into the barn, or at the time of feeding out. We do not find that our cows winter better on pure English hay than they do when fed a part of the time on that of a coarser quality. When kept through on the best of English hay, the food is so rich that cows become tired of it at the time when they need the most care; and it has often been noted that when kept on hay of a poorer quality through the coldest weather, and then fed on good hay in the spring, they relish it better, and fatten their calves better than when kept wholly on rich food.

But we often have hay too poor for cows, and if we have no young stock what shall we do with this? If some of the best hay should be thoroughly mixed up with this it would sweeten the whole. Most people are extremely careful to keep the good hay separate from the poor—but if it is all to be foddered out what harm arises from the mixture! We have often mixed good hay with that of a poorer quality in the winter season. By letting both lie together over night the poorer sort becomes, in some degree, impregnated with the flavor of the good, and the cattle will discover the improvement. If you doubt this try an experiment. Set a plate of rich pound cake into a cupboard or chest, with a lump of butter, and let them remain in the same apartment one night; you will find at breakfast, what company your butter has had. It is powerfully impregnated with the flavor of the cake.

But a better time for mixing hay is when we stow it away in summer. If we have a supply of old meadow, or of straw, we can mix it with our new mown clover, and the whole will be leavened. In such case we need not dry our clover so long by some hours, and this is often a great saving of labor, and of leaves of the clover.

The Markets—November 14.

Flour is now selling in this market at $10 25 per barrel—*Wheat* (Pennsylvania) $2 10 a 2 15 per bushel. *Rye*, $1 35 a 1 37½—*Corn*, 85 a 86 cents—*Oats*, 40 a 43—*Clover seed*, $6 50—*Flax seed*, $1 75 a 1 80—*Timothy*, $3 00 a 3 50—*Wool*, Saxony, 68 a 70 per lb.; Merino, 60 a 67½; quarter and common, 40 a 44—*Butter*, extra, per tub, $19 a 20; fresh butter, retailed in market, 25 a 37½—*Jersey Hams*, 14½ a 15—*Beef*, mess, per barrel, $13 00 at 13 50—*Beans*, white, per bushel, $1 87—*Plaster* of Paris, per ton, $3 25 a 3 50. Prices are looking upward, and speculators are busily at work.